

DETAILED ACTION

1. This office action is in response to after final amendment filed 3/30/2009.
2. The after final amendment has been reviewed and entered.

Response to Arguments

3. Applicant's remarks/amendment, see page 8-11, filed 3/30/2009, with respect to amended claims 1-7, 10-16, 38, 41, 44-45, 48-51, 53-56 have been fully considered and are persuasive. Claims 1-7, 10-16, 38, 41, 44-45, 48-51, 53-56 are now indicated allowable. However, in order to advance prosecution in the case an examiner's amendment was considered necessary.

EXAMINER'S AMENDMENT

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Xiang Lu on 04/08/2009.

The application has been amended as follows:

IN THE CLAIMS:

Claims 31-37, 46, 52 have been cancelled.

Claim 1, line 9-10, after "time at the first end of the DSL channel without" the expression "an effect of a filter or an automatic gain controller" has been replaced with -- the effect of the filter or the automatic gain controller --.

Claim 10, line 9-10, after "measured at the first end without" the expression "an effect of a filter or an automatic gain controller" has been replaced with -- the effect of the filter or the automatic gain controller --.

Claim 51, line 9-10, after "the first end of the DSL channel without" the expression "an effect of a filter or an automatic gain controller" has been replaced with -- the effect of the filter or the automatic gain controller --.

Reason for Allowance

5. The following is an examiner's statement of reasons for allowance:

The prior art of record in combination with other claimed limitations neither teaches nor renders obvious a method of retrieving channel characteristics of a DSL channel having a plurality of bins, comprising:
determining, at tip and ring terminals of a modem input port, and storing in data registers on a per bin basis a channel frequency response measurement and a noise measurement measured at initialization at a first end of the DSL channel without an effect of a filter or an automatic gain controller; determining and storing in data registers on a per bin basis a signal-to-noise measurement measured at show time at the first end of the DSL channel without the effect of the filter or the automatic gain controller.

Such limitations as recited in independent claims 1 and 51, are neither anticipated nor rendered obvious by the prior art of record.

Claim 10 is a corresponding apparatus claim and is therefore treated likewise claim 51 noted above.

The claims 2-7, 11-16, 38, 41, 44-45, 48-51, and 53-56 are allowed by virtue of their dependency to base claims noted above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qutbuddin Ghulamali whose telephone number is (571)-272-3014. The examiner can normally be reached on Monday-Friday, 7:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

QG.
April 8, 2009.

/Chieh M Fan/
Supervisory Patent Examiner, Art Unit 2611